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ABSTRACT

A comparative study was made of ways in which teacher candidates and their non-teaching counterparts in college differ in their academic and social backgrounds and in their bases for career decisions. Questionnaires were submitted to 146 non-teaching students and 258 teacher candidates. Analysis of survey findings indicated that: (1) the high school academic background of entering teacher candidates was comparable to that of non-teaching majors; (2) the groups were generally similar in the pattern of extra-curricular activities in high school; (3) teacher candidates were more likely to be female, to have transferred from another school, and to have come from families with a somewhat lower income than non-teaching majors; and (4) teacher candidates were more likely to have participated in teaching experiences, to have reported a high level of reading for pleasure, and to have been elected to honor societies. An analysis of reasons for career choice in the two groups indicated that teacher salaries and limited opportunities for advancement were factors inhibiting students from choosing to teach. (JD)

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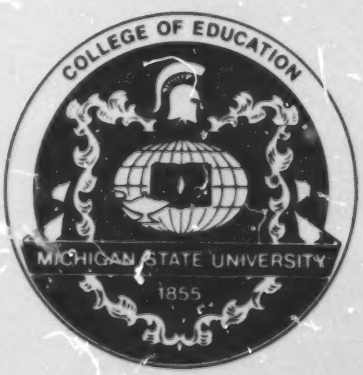
Research and Evaluation in Teacher Education

Program Evaluation Series No. 2

COMPARING ACADEMIC BACKGROUNDS AND CAREER ASPIRATIONS OF EDUCATION AND NON-EDUCATION MAJORS

C. Book, D. Freeman and B. Brousseau



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Comparing Academic Backgrounds and Career Aspirations of Education and Non-Education Majors

In the wake of recent commission and research reports there is widespread national concern about the academic competence and personal characteristics of those entering the teaching profession. Among the most highly publicized of these reports is Vance and Schlechty's (1982) national longitudinal study of high school seniors who ultimately became teachers. According to these authors

> The general pattern of the data . . . indicates that those most likely to enter and be committed to teaching are drawn from those most likely to score lower on the SAT. . . . Furthermore, when we compare the recruits to the actual teachers, there is no indication that schools are more likely to hire the more academically able than the less academically able. Moreover, a comparison of the committed teachers and the confirmed defectors shows that those with high ability who enter teaching are more likely to leave than those with low ability. (pp. 23-24)

An important challenge to Vance and Schlecty's conclusions comes from a growing body of studies that have shown that college entrance examination scores of students enrolling in specific teacher preparation programs are at least equal to those of non-education majors at the same institution (e.g., AACTE Briefs, 1984; Loadman, 1983). A recent analysis conducted by the authors is illustrative of these investigations. The mean composite score on the American College Testing Program (ACT) exam for a representative sample of 107 entering teacher candidates at Michigan State University ($\bar{x}$=22) corresponded to the 47th percentile for all MSU students. In the same analysis, 34 entering teacher candidates who elected to take the Scholastic Aptitude Test (SAT) had mean scores on the verbal and math subtests ($\bar{x}$ = 470 and 528) that fell at the 60th and 58th percentiles for all MSU students.

To date, these and other comparisons of teacher candidates and their non-teaching counterparts have centered almost entirely on measures of academic potential as reflected in college entrance examination test scores and high school grade point averages. This narrow focus has restricted the contribution these studies might have made to our general understanding of the characteristics of students entering the teaching profession and their reasons for choosing teaching as a career. This study was therefore designed to consider other important ways in which the two groups may differ. Two questions served as guides to data collection and analyses:

(1) Do the academic and social backgrounds of teacher candidates at Michigan State University differ from those of their non-teaching counterparts?

(2) In what ways do the bases for career decisions differ among teaching and non-teaching majors?

Procedure

Sample

The group that will be labeled "Teacher Candidates" in this report represents a subset of 391 students who completed an "Entering Teacher Candidate" questionnaire survey while enrolled in an introductory educational psychology class at Michigan State. Only those students who reported that "classroom teaching is the only career I am considering at this point in time" or "classroom teaching is my first choice of the careers I am considering" were included in the final sample. The "Non-teachers" were selected from a sample of 232 students enrolled in an introductory communication class at MSU. These individuals completed a modified version of the questionnaire given to entering

teacher candidates. On the basis of responses to the question, "What career do you intend to pursue?," a pure non-teacher sample was identified (i.e., any student who mentioned anything even remotely connected with education was removed from the sample).

Preliminary analyses indicated a significant difference in the "current class status" of the two groups. To reduce this possible source of confounding, all freshmen were removed from the non-teacher sample and all "post B.A., B.S. degree" students were dropped from the teacher candidate sample. The final non-teaching sample consisted of 146 individuals - 74 sophomores, 51 juniors, and 21 seniors. The final teacher candidate sample included 258 individuals - 79 sophomores, 143 juniors and 36 seniors.

Career Plans of the Non-Teaching Sample: Students in the introductory communication class intend to pursue a wide array of careers, with the largest number (42%) preparing for a job in business or industry. Fifteen percent plan to pursue a career in the arts (e.g., commercial art, performing arts, writing), seven percent are preparing for professional roles such as lawyer or physician, and four percent intend to enter health care or social services. Only seven percent indicated that their choice of careers was undecided. Nevertheless, it should be recognized that those pursuing careers in science and engineering are underrepresented in our sample.

Results

Academic Backgrounds

If teacher candidates are deficient in general knowledge as some critics maintain, those deficiencies might be traced to their failure to pursue rigorous academic coursework in high schools. However, as the data summarized

in Table 1 indicate, the academic preparation of entering teacher candidates was comparable to that of non-teaching majors. Both groups completed solid college preparation programs in high school. Overall, about 47% of the students in both groups completed four or more years of math, 75% had four or more years of English, 36% had four or more years of natural science, and 23% had at least two years of a foreign language.

Insert Table 1 about here

As might be expected from the fact that both groups completed college preparation programs, no significant differences were found in the high school grade point averages of 162 teacher candidates (mean g.p.a. = 3.14) and 143 non-teaching majors (mean g.p.a. = 3.07).[1] Likewise, there were no differences in the percentage of students in either group who were required to take remedial math, reading, or writing courses in college. Approximately 27% of the students in both groups reported taking a remedial math class, about 10% said they took a remedial reading class, and 17% said they were required to take a remedial writing class.

Given these and the earlier comparisons of college entrance examination scores, it is reasonable to conclude that the results of the Vance and Schlecty study do not generalize to students entering MSU's teacher preaparation programs. Rather, these data indicate that teacher candidates at Michigan State are very similar to their non-teaching counterparts in overall levels of academic preparation and academic potential.

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1 High school grade point averages, SAT and ACT scores were not availalbe for all students in the sample.

Social Background and Demographic Characteristics

Demographic Characteristics: Several items on the survey dealt with social background and demographic characteristics that might distinguish teacher candidates from non-teaching majors. It should come as no surprise that relative to their non-teaching counterparts, students enrolling in teacher preparation programs were more likely to be female (75% vs. 56%) and caucasian (98% vs. 87%). Teacher candidates were also more likely to have transfered to MSU from another school, ususally a community college (42% vs. 30%).

There were interesting similarities and differences in the family background of the two groups. A majority of the students in both groups came from relatively large families, with 53% from families with four or more children. Across both groups, most of the students' mothers and more than two-thirds of their fathers had earned at least some college credits. Nevertheless, a much higher proportion of non-education majors came from families whose combined income was more than $50,000 (36% vs. 12%).

High School Extra-Curricular Activities: The groups were generally similar in the pattern of extra-curricular activities they pursued while in high school. For example, approximately two-thirds of the students in both groups held a part-time job. Likewise, the proportion of individuals who served in various leadership roles (e.g., editor of the school newspaper) was usually about the same for education and non-education majors. However, it was somewhat surprising that the two groups did not differ in the amount of time they allocated to community service or to teaching experiences involving groups of children (e.g., camp counselor). Approximately 41% of all students in the sample participated in at least some community service or volunteer work and 45% did at least some teaching involving groups.

On the other hand, as might be expected, teacher candidates were more likely to have participated in teaching experiences such as tutoring that involved only one child (39% vs. 29%) or to have worked with handicapped youngsters (28% vs. 21%). In addition, a higher percentage of teacher candidates than non-teacher candidates reported a high level of reading for pleasure (39% vs. 25%) and a larger proportion of teacher candidates were elected to National Honor Society (54% vs. 40%).

Career Plans

Choice of Careers: One of the central purposes for this study was to provide a better understanding of why individuals either do or do not pursue a career in teaching. Consistent with this goal, one section of the questionnaire asked participants to check statements that represented important reasons why they wanted to enter their chosen career. There were no significant differences between teaching and non-teaching majors on three of the eleven statements in this set. About 71% of the members of both groups said their choice of careers "provides an opportunity to be creative," about 85% said "this field is more likely to provide a sense of personal achievement and satisfaction than is true of other careers I might enter," and about one-half reported that "persons I respect have encouraged me to enter this field." As might be expected, however, teacher candidates were more likely than their non-teaching counterparts to indicate that a former teacher had been influential in their choice of careers (29% vs. 6%).

Table 2 provides a summary of responses to the other eight items in this section of the questionnaire. Responses to the first three statements in this set indicate that one of the most important reasons for becoming a teacher is to satisfy the desire to help others. As these data show, the proportion of

teacher candidates who said they chose teaching because of the opportunity this career provides to help others in some specific way was sometimes double the corresponding figure for non-teachers.

Insert Table 2 about here

Differential responses to other statements in Table 2 suggest that relative to teacher candidates, non-teaching majors were more likely to be concerned about salaries and the opportunity their career will provide to apply what they have learned in college. On the other hand, teacher candidates were far more likely to view the opportunity to work with children as an important consideration in selecting a career. Finally, the fact that a higher proportion of non-teaching majors than teacher candidates noted that they were "...not as successful as (they) had hoped to be in courses that would have prepared (them for their) initial choice of careers," provides reason to question the popular assumption that teaching is the only career to which unsuccessful college students retreat.

Reasons for Deciding Not to Teach: An open-ended question on the survey asked non-teachers to "cite one or two reasons why teaching is no longer part of your career plans or why you have not considered teaching as a career." Frequently cited reasons provide a clear picture of the unattractive qualities that are most likely to be associated with a teaching career. Of the total of 211 reasons that were given, 28% dealt with the perception that teachers' salaries are inadequate, 21% focused on high unemployment or lack of job security, and eight percent cited limited opportunities for professional advancement. Other responses focused on undesirable qualities of the teachers'

role, including the belief that teaching is monotonous or boring (11%), that teaching provides little satisfaction and offers few challenges (9%), and that the classroom is too confining given a preference for flexibility, travel, or work out-of-doors (7%).

Occasionally, individuals indicated that their interests or aptitudes were not especially well suited for teaching. Nearly ten percent of the students said they did not think they had enough patience to teach. A few said they were not comfortable talking to a group and some expressed a disliking for children, especially those who are disrespectful. Nevertheless, it is clear that a lack of confidence in the ability to teach rarely dissuades individuals from pursuing a career in teaching. When asked, "How confident are you that you could succeed as a full time classroom teacher with no coursework or experience in education?," nearly one-third of the non-teaching majors reported that they have high or complete confidence that they could succeed now as full-time teachers! The corresponding figure for teacher candidates has steadily declined over the past few years and for this sample was only nine percent (see Book, Byers, and Freeman, 1983). This contrast provides a quantitative expression of general societal views that teaching is not difficult and that there is little one need do to prepare for a teaching career.

Factors Considered in Deciding Between Two Job Offers: Individuals in both groups were asked to rate the importance of various factors they might consider in deciding which of two job offers to accept - either two different teaching positions or two jobs in the student's preferred career. Once again, relative to teacher candidates, non-teaching majors were clearly more concerned about salaries and opportunities for professional advancement. Whereas 56% of the non-teaching majors reported that the opportunity for professional advancement

would be of "crucial" importance in their choice of positions, only 13% of the teacher candidates rated this factor as crucial. Likewise, a much higher percentage of non-teachers reported that salary and fringe benefits would be of crucial importance in choosing between two positions (36% vs. 16%).

On the other hand, the two groups did not differ to any great extent in the importance they would attribute to the geographical location of the job or to the intellectual or affective climate of the workplace. Nevertheless, a higher percentage of teacher candidates than non-education majors indicated that they intend to search for a job in Michigan (83% vs. 63%).

Anticipated Career Tenure: There were no major differences between the two groups in the length of time they anticipated remaining in their preferred career or their anticipated reason for leaving that line of work. Approximately one-half of the members of both groups expect to remain in their chosen careers for ten or more years; less than 10% expect to change jobs within the first five years. When individuals who planned to stay for less than ten years were asked why they might leave this line of work, the two groups again responded in similar ways. Across both groups, 28% reported they expect to leave to take or prepare for a managerial or administrative position within their chosen field, 37% said they will leave to raise a family, and 23% said they expect to change to, or prepare for, a different career.

Summary: Collectively, these analyses provide support for the argument that higher salaries and merit pay will attract individuals to teaching. The dominant perception of teaching by non-teaching majors is that it lacks enough challenge, opportunity for advancement, and salary to be attractive. On the other hand, those MSU Students who are currently choosing teaching as a career

are as academically competent as their non-teaching counterparts and more concerned about helping others and less concerned about salaries.

TABLE 1

Years of High School Coursework Completed
by Teaching and Non-Teaching Majors (In percents)

	None	One	Two	Three	Four or more
English					
Non-Teaching	0.7	0	5.5	17.1	76.7
Teaching	1.2	0.8	6.6	17.1	74.3
Natural Science					
Non-Teaching	0.7	10.3	22.8	24.1	42.1
Teaching	1.6	11.3	28.0	26.8	32.3
History/Social Studies					
Non-Teaching	0	8.9	43.2	23.3	24.7
Teaching	0.4	10.2	35.3	31.8	22.4
Mathematics					
Non-Teaching	0	3.4	16.6	28.3	51.7
Teaching	1.2	5.9	20.9	28.1	43.9
Foreign Languages					
Non-Teaching	22.6	28.1	22.6	9.6	17.1
Teaching	26.3	17.1	23.9	14.3	16.3

TABLE 2

Differences in Reasons for Choosing Preferred Careers (In percents)

Reasons	Non-Teaching Majors	Teaching Majors
This career provides an opportunity to help others less fortunate than myself.	21	53
Through this career, I can help others gain knowledge and understanding of things I consider important.	61	79
Through this career, I can help others gain a sense of personal achievement and self esteem.	42	95
This career provides an opportunity to apply what I have learned in my major field of study.	75	63
I can make better use of my abilities in this field than in other careers I might enter.	80	75
I was not as successful as I had hoped to be in courses that would have prepared me for my initial choice of careers.	27	14
I love to work with children.	10	81
Salaries in this field are at least adequate.	66	47

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